**What is Claimed is:**

1. A subcellular protein expressed from *Francisella tularensis* infected mammal subculture growing in synthetic salts medium of weak acidity.

2. The subcellular protein of claim 1, wherein said protein has a molecular weight of around 52kDa.

3. The subcellular protein of claim 1, wherein said infected mammal is first vaccinated with a component extracted from a first infectious agent and then infected with a high dosage of a second infectious agent.

4. The subcellular protein of claim 3, wherein said component is O-polysaccharide, said first infectious agent is *Brucella abortus* and said second infectious agent is *Francisella tularensis.*

5. The subcellular protein of claim 1, wherein said mammal is a mouse or a human.

6. The subcellular protein of claim 1, wherein said *Francisella tularensis* infection is caused by lethal dosage of live vaccine strain.

7. A method for expressing a subcellular protein from a *Francisella tularensis* infected mammal, comprising subculturing said infected mammal in synthetic

salts medium of weak acidity and in sub-optimal environment to enhance the expression.

8. The method of claim 7, wherein said sub-optimal environment occurs during the first three rounds of subculturing.

9. The method of claim 7, wherein said subcellular protein is used as a vaccine candidate against *Francisella tularensis*.

10. A method for identifying an infectious agent in a mammal, comprising vaccinating the mammal against a first infectious agent and subsequently exposing the mammal to a second infectious agent to be identified, thereby causing the mammal to express a subcellular protein against the second infectious agent.

11. The method of claim 10, wherein said first infectious agent is *Brucella abortus* and said second infectious agent is *Francisella tularensis*.

12. The method of claim 10, wherein said subcellular protein is detected from antiserum collected from said mammal.

13. The method of claim 10, wherein said first and second infectious agents are bacteria, fungi, yeasts, viruses or parasites.

14. The method of claim 10, wherein said mammal is a mouse.

15. The method of claim 11, wherein the vaccine against said first infectious agent is O-polysaccharide.

16. The method of claim 11, wherein said subcellular protein has a molecular weight of around 52kDa.

17. Use of the subcellular protein of claim 10 as a vaccine candidate against said second infectious agent in a mammal.

18. Use of the subcellular protein of claim 17 as an agent to assess the immune status and level of protection for a mammal vaccinated with said vaccine candidate.

19. Use of the antisera containing the subcellular protein of claim 12 for probing antigens of said infectious agent to be identified.

20. A method for assessing *in vitro* the usefulness of a vaccine lot for quality assurance, comprising identifying and quantifying key subcellular protein in said vaccine lot.

21. The method of claim 20, wherein said vaccine lot is a *Francisella tularensis* vaccine lot.

22. The method of claim 21, wherein said *Francisella tularensis* subcellular protein has a molecular weight of around 52kDa.

23. A method for identifying the presence of a *Francisella tularensis* infection in a mammal, comprising detecting the presence of subcellular protein having a molecular weight of about 52 kDa in the mammal's serum.

24. A method for identifying the presence of a *Francisella tularensis* infection in a mammal, comprising detecting the presence of anti-myosin antibodies in the mammal's serum.